

## What is Claimed Is:

- [c1] 1.A method for utilizing power management functionality between DSL peers, comprising the steps of:
- receiving a power management request, from a driver component associated with a first DSL device;
  - sending a power management state transition request through an embedded operations channel to the second DSL device;
  - determining whether a positive acknowledgement response has been received from the second DSL device; and
  - effecting a power state transition and acknowledging the power management request to the driver component if it is determined that a positive acknowledgement response has been received from the second DSL device.
- [c2] 2.The method of claim 1, further comprising the steps of:
- determining whether a port of the first DSL device is open on which to send state transition information to a second DSL device; and
  - performing the following steps only if it is determined that a port of the first DSL device is open:
    - sending the power management state transition request through the embedded operations channel to the second DSL device;
    - determining whether the positive acknowledgement response has been received from the second DSL device; and
    - effecting a power state transition and acknowledging the power management request to the driver component if it is determined that a positive acknowledgement response has been received from the second DSL device.
- [c3] 3.The method of claim 2, further comprising the step of:
- performing the following steps if it is determined that a port is not open:
    - effecting the requested power state transition; and
    - acknowledging the power management request to the driver component.
- [c4] 4.The method of claim 1, further comprising the steps of:
- determining whether a power management protocol is available; and

performing the following steps only if it is determined that the power management protocol is available:

- sending a power management state transition request through an embedded operations channel to the second DSL device; and
- determining whether a positive acknowledgement response has been received from the second DSL device; and
- effecting a power state transition and acknowledging the power management request to the driver component if it is determined that a positive acknowledgement response has been received from the second DSL device.

[c5]

5.The method of claim 4, further comprising the step of:  
performing the following steps if it is determined that a positive acknowledgement response has not been received from the second DSL device:  
effecting the requested power state transition; and  
acknowledging the power management request to the driver component.

[c6]

6.A method for utilizing power management functionality between DSL peers, comprising the steps of:  
receiving a power management request, from a driver component associated with a first DSL device;  
determining whether a port of the first DSL device is open on which to send state transition information to a second DSL device;  
performing the following steps if it is determined that a port is not open:  
effecting the requested power state transition; and  
acknowledging the power management request to the driver component;  
performing the following steps if it is determined that a port is open:  
determining whether a power management protocol is available;  
performing the following steps if it is determined that the power management protocol is not available:  
closing the port;  
effecting the requested power state transition; and  
acknowledging the power management request to the driver component;

performing the following steps if it is determined that the power management protocol is available:

- sending a power management state transition request through an embedded operations channel to the second DSL device;
- determining whether a positive acknowledgement response has been received from the second DSL device;
- performing the following steps if it is determined that a positive acknowledgement response has not been received from the second DSL device:
  - closing the port;
  - effecting the requested power state transition; and
  - acknowledging the power management request to the driver component; and
- performing the following steps if it is determined that a positive acknowledgement response has been received from the second DSL device:
  - effecting a power state transition; and
  - acknowledging the power management request to the driver component.

[c7]

7.A system for utilizing power management functionality between DSL peers, comprising:

- means for receiving a power management request, from a driver component associated with a first DSL device;
- means for sending a power management state transition request through an embedded operations channel to the second DSL device;
- means for determining whether a positive acknowledgement response has been received from the second DSL device; and
- means for effecting a power state transition and acknowledging the power management request to the driver component if it is determined that a positive acknowledgement response has been received from the second DSL device.

[c8]

8.The system of claim 7, further comprising:

- means for determining whether a port of the first DSL device is open on which

to send state transition information to a second DSL device; and  
means for sending the power management state transition request through the embedded operations channel to the second DSL device only if it is determined that a port of the first DSL device is open;  
means for determining whether the positive acknowledgement response has been received from the second DSL device; and  
means for effecting a power state transition and acknowledging the power management request to the driver component if it is determined that a positive acknowledgement response has been received from the second DSL device.

[c9] 9.The system of claim 8, further comprising:  
means for effecting the requested power state transition if it is determined that a port is not open; and  
means for acknowledging the power management request to the driver component.

[c10] 10.The system of claim 7, further comprising:  
means for determining whether a power management protocol is available;  
means for sending a power management state transition request through an embedded operations channel to the second DSL device if it is determined that a power management protocol is available;  
means for determining whether a positive acknowledgement response has been received from the second DSL device; and  
means for effecting a power state transition and acknowledging the power management request to the driver component if it is determined that a positive acknowledgement response has been received from the second DSL device.

[c11] 11.The system of claim 10, further comprising:  
means for effecting the requested power state transition if it is determined that a positive acknowledgement response has not been received from the second DSL device; and  
means for acknowledging the power management request to the driver component.

[c12] 12.A system for utilizing power management functionality between DSL peers,

comprising:

means for receiving a power management request, from a driver component associated with a first DSL device;

means for determining whether a port of the first DSL device is open on which to send state transition information to a second DSL device;

means for effecting the requested power state transition if it is determined that a port is not open:

means for acknowledging the power management request to the driver component if it is determined that a port is not open;

means for determining whether a power management protocol is available if it is determined that a port is open;

means for closing the port if it is determined that the power management protocol is not available;

means for effecting the requested power state transition if it is determined that the power management protocol is not available

means for acknowledging the power management request to the driver component if it is determined that the power management protocol is not available;

means for sending a power management state transition request through an embedded operations channel to the second DSL device if it is determined that the power management protocol is available;

means for determining whether a positive acknowledgement response has been received from the second DSL device;

means for closing the port if it is determined that a positive acknowledgement response has not been received from the second DSL device;

means for effecting the requested power state transition if it is determined that a positive acknowledgement response has not been received from the second DSL device

means for acknowledging the power management request to the driver component if it is determined that a positive acknowledgement response has not been received from the second DSL device;

means for effecting a power state transition if it is determined that a positive acknowledgement response has been received from the second DSL device; and

means for acknowledging the power management request to the driver component if it is determined that a positive acknowledgement response has been received from the second DSL device.

[c13]

13.A computer readable medium incorporating instructions for utilizing power management functionality between DSL peers, the instructions comprising:  
one or more instructions for receiving a power management request, from a driver component associated with a first DSL device;  
one or more instructions for sending a power management state transition request through an embedded operations channel to the second DSL device;  
one or more instructions for determining whether a positive acknowledgement response has been received from the second DSL device; and  
one or more instructions for effecting a power state transition and acknowledging the power management request to the driver component if it is determined that a positive acknowledgement response has been received from the second DSL device.

[c14]

14.The computer readable medium of claim 13, the instructions further comprising:  
one or more instructions for determining whether a port of the first DSL device is open on which to send state transition information to a second DSL device;  
and  
one or more instructions for executing the following instructions only if it is determined that a port of the first DSL device is open:  
    one or more instructions for sending the power management state transition request through the embedded operations channel to the second DSL device;  
    one or more instructions for determining whether the positive acknowledgement response has been received from the second DSL device; and  
    one or more instructions for effecting a power state transition and acknowledging the power management request to the driver component if it is determined that a positive acknowledgement response has been received from the second DSL device.

[c15] 15.The computer readable medium of claim 14, the instructions further comprising:

one or more instructions for executing the following instructions if it is determined that a port is not open:

one or more instructions for effecting the requested power state transition; and

one or more instructions for acknowledging the power management request to the driver component.

[c16] 16.The computer readable medium of claim 13, the instructions further comprising:

one or more instructions for determining whether a power management protocol is available; and

one or more instructions for executing the following instructions only if it is determined that the power management protocol is available:

one or more instructions for sending a power management state transition request through an embedded operations channel to the second DSL device; and

one or more instructions for determining whether a positive acknowledgement response has been received from the second DSL device; and

one or more instructions for effecting a power state transition and acknowledging the power management request to the driver component if it is determined that a positive acknowledgement response has been received from the second DSL device.

[c17] 17.The computer readable medium of claim 16, the instructions further comprising:

one or more instructions for executing the following instructions if it is determined that a positive acknowledgement response has not been received from the second DSL device:

one or more instructions for effecting the requested power state transition; and

one or more instructions for acknowledging the power management

request to the driver component.

[c18]

18.A computer readable medium incorporating instructions for utilizing power management functionality between DSL peers, the instructions comprising:  
one or more instructions for receiving a power management request, from a driver component associated with a first DSL device;  
one or more instructions for determining whether a port of the first DSL device is open on which to send state transition information to a second DSL device;  
one or more instructions for executing the following instructions if it is determined that a port is not open:

- one or more instructions for effecting the requested power state transition; and

- one or more instructions for acknowledging the power management request to the driver component;

one or more instructions for executing the following instructions if it is determined that a port is open:

- one or more instructions for determining whether a power management protocol is available;

- one or more instructions for executing the following instructions if it is determined that the power management protocol is not available:

- one or more instructions for closing the port;

- one or more instructions for effecting the requested power state transition; and

- one or more instructions for acknowledging the power management request to the driver component;

- one or more instructions for executing the following instructions if it is determined that the power management protocol is available:

- one or more instructions for sending a power management state transition request through an embedded operations channel to the second DSL device;

- one or more instructions for determining whether a positive acknowledgement response has been received from the second DSL device;

one or more instructions for executing the following instructions if it is determined that a positive acknowledgement response has not been received from the second DSL device:

- one or more instructions for closing the port;
- one or more instructions for effecting the requested power state transition; and
- one or more instructions for acknowledging the power management request to the driver component; and

one or more instructions for executing the following instructions if it is determined that a positive acknowledgement response has been received from the second DSL device:

- one or more instructions for effecting a power state transition; and
- one or more instructions for acknowledging the power management request to the driver component.